Expect the UNEXPECTED unexpected

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Photo by SrA Nathaniel G. Belver

B-1 enters fog bank in the flare

Courtesy Photo

We've all heard of Murphy's Law. I'm not sure of the exact definition, but I think it goes something like this "if it can happen, it will," and one balmy October morning in Texas the unexpected did happen to me.

It was a sortie like almost any other. We were scheduled as the first two-ship formation in a 3-day, 120-sortie surge for the 7th Bomb Wing at Dyess AFB, Texas. Every aspect of the mission was covered in detail the day prior in the mass brief. It was a routine sortie: takeoff, proceed direct to the range, perform a Joint Direct Attack Munition (JDAM) weapons release on a multiple target set, exit the range, and return to base. We didn't want to spend any extra time on the range performing additional training. We decided we would get the jets back to base as quickly as possible to let maintenance have them for as much time as possible during the surge.

Scheduled takeoff was 0500, pushing our "show time" at the squadron into the early morning hours, yet late enough to allow for every bit of extra sleep. I determined that a 2-hour show prior to takeoff would be enough time to check over the final details of the sortie. The eight crew members showed on time, but it was obvious that each of us had just rolled out of bed and was still shaking off the sleep from the night before. It was time to wake up: *Weather, Activate flight plan, NOTAMS, TOLD, Self,* we covered every detail of the *WANTS* check completely, and we stepped to the jets. Nothing at the step desk gave us any indication that the sortie would be anything less than an as planned, "black line" sortie.

And for almost the entire sortie it was black line. Our formation took off on time, proceeded to the range, executed a successful weapons release, and proceeded back to base with the wings swept cruising along at .95 mach. With the meat of the mission behind us, the last thing to do was put the jets on the ground, giving them back to maintenance so they could begin prepping them for their next sorties. Since it was early in the morning, the sun hadn't risen, and we would be performing a night landing. "Great, I wasn't expecting to update that bean," I thought to myself as we sped home.

Eighty miles out I directed my wingman to proceed with the standard radio drill, one spin on Air Terminal Information Station (ATIS) then back to squadron common frequency. ATIS reported the weather as few clouds at 5,000 feet, visibility greater than seven, winds variable at three knots, altimeter 30.02, temperature 54. That's all the information we needed. It would be a vanilla approach to end a vanilla sortie. What could go wrong?

With the descent check complete and the runway in sight 30 miles out, I directed "Two" to take spacing while being vectored to the Instrument Landing System (ILS) approach. The vectors lined us up with the runway on a 12-mile final approach. I configured the jet, and tower called out, "Dark 11, check gear down, you're cleared to land." Everything appeared to be routine. At the final approach fix my copilot stated, "Handle down, three green, slats extended, flaps full, safety check complete."

The next thing I heard was a request from tower, "Dark 11 say conditions on final."

"What, are you new?" I thought to myself, "It's clear and a million. Set down the coffee and look outside!" I responded with "standby" and continued the approach. My cross-check confirmed both visually and with the instruments that we were on course and glidepath, everything looked normal.

the next look outside was totally unexpected ... visibility was almost zero

At 500 feet the copilot said, "Runway in sight, but it looks a little hazy." I concurred, but from the look of it, the haze was very thin and wouldn't be a factor. I could still see the approach lights, Visual Approach Slope Indicator lights, and all the runway edge lights. No problem, besides ATIS was calling the visibility 7 miles.

At the decision height of 200 feet, the conditions hadn't changed. With the exception of a little more haze, the landing environment was still clearly discernable, so I continued the approach. At 100 feet, I started picking up the normal visual cues to begin my round out, but it was dark and the haze was getting thicker. I thought to myself, "better cross-check the ILS just to make sure."

The indications showed on course and glidepath. That was a good feeling. The next look outside was totally unexpected and almost unbelievable, visibility was almost zero with the runway lights a complete blur. All the normal landing cues had disappeared. This is where temporal distortion set in, and what happened in less than a second seemed to last minutes. It felt like I had the time to cross-check my course, glideslope, airspeed, and descent rate.

Just as "Go" started out of the copilot's mouth commanding a go around, the main gear touched down. At that point, I realized that if I executed a go around, we would be accelerating through the same conditions. I decided to keep the jet on the ground because I could still see the runway edge lights and was able to maintain runway centerline. Half way down the runway, just abeam the tower, we popped out of the fog bank into conditions that were "clear and a million."

I immediately radioed tower to inform Dark 12 of the impending conditions he was about to encounter. As I turned off the runway, I saw my wingman's landing light disappear into the fog at about 50 feet above the runway threshold. It reappeared almost immediately as they executed a go around. Now what? As flight lead I hadn't discussed a divert option in detail because I felt the chances were remote based on the weather forecast. Hopefully, they had talked about it in their individual crew brief. Fortunately, tower had more on the ball, and they offered an opposite direction landing since that end of the runway was clear with light and variable winds. Tower changed the landing runway and my wingman landed uneventfully.

Photo by SrA Christina M. Rumsey

It was unbelievable! I remembered talking about a low-level fog bank during weather class in Undergraduate Pilot Training during our annual instrument refresher course, but I considered it a one-in-a-million phenomenon and never expected it in the dry plains of Texas. Unfortunately, I overlooked the warning signs. Even though fog was not in the forecast, the temperature-dew point spread for our time of arrival was conducive to fog formation. It's not uncommon for a fog bank to form over a nearby body of water, and if the winds are just right, it can move over the airfield. That's exactly what happened on this October morning. Half of the field was "zero-zero," and the other half was "clear and a million."

The lessons I learned are old ones but need repeating. Use all the information you have available. Look closely at the weather forecast, even when it looks routine, as you may find a hidden piece of information that will give you a craniums up on what you may encounter down the road. Also, don't be quick to disregard inputs from outside agencies, they may hold important information to clue you in on possible hazards. If I had taken the time to ask the tower controller what he saw, he could have informed me of the fog bank forming over the approach end of the runway. Lastly, there are a number of factors that can cause you to divert, and it's not always weather. Always plan a thorough divert option and brief it between the crew and those in the formation. There are too many unknown factors in flying to pass up information that is available to you, so have a plan and expect the unexpected, because "Murphy" can strike even when you think you've covered all the particulars.